

## Terms of Reference:

# Land Use Compatibility Study

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### Description:

Introduction of new sensitive land uses in proximity to existing employment areas, may result in adverse impact not only on the new sensitive land uses, but may also restrict future employment expansions and operations. As such, assessment of air quality, odour, dust, noise, and vibration impacts on proposed new sensitive developments is required to ensure feasibility of development through design and/or implementation of appropriate mitigative measures. It is also necessary to consider possible expansion of the surrounding employment uses to avoid undue limitations on existing operators.

As per the Ministry of the Environment, Conservation and Parks (MECP)'s Land Use Compatibility Guidelines a sensitive land use is defined as a building, amenity area or outdoor space where routine or normal activities occurring at reasonably expected times would experience 1 or more adverse effect(s) from contaminant discharges generated by a nearby facility. The sensitive land use may be a part of the natural or built environment.

The Terms of Reference (ToR) is intended to assist developers in scoping and preparing appropriate and relevant studies for air quality, noise and vibration impacts as part of the land use compatibility study, for the City's review and approval prior to approval of a proposed development.

### Development Application Stream(s):

A Land Use Compatibility Study may be required for anyone one of the following development applications, depending on site specific circumstances and context:

- Official Plan Amendment
- Zoning By-law Amendment
- Draft Plan of Subdivision
- Site Plan Control
- Committee of Adjustment

### Prepared By:

A Study is to be prepared on behalf of the proponent by consultants that are fully accredited, qualified and/or certified in the relevant matters being evaluated and recommended (for example air quality assessments should be performed by an engineer/practitioner fully accredited in such field, etc.)

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### Rationale:

The objective of a Study is to assess potential adverse effects and recommend separation distances and mitigation measures, if needed, to promote compatibility with surrounding land uses.

All industries in Ontario are required to comply with MECP regulations and guidelines with respect to air quality and noise.

### Content:

It is the responsibility of the proponent to carry out the appropriate land use compatibility studies based on MECP's Land Use Compatibility D-Series Guidelines including air quality, odour, dust, noise and vibration. Compatibility studies shall involve site-specific modelling exercises based on the 'worst case scenario'. The types of studies required may vary with the facility involved. These studies shall be completed by qualified licensed professionals.

Specific requirements are included in the various documents listed in the Procedure D-1-2, "Land Use Compatibility: Specific Applications", available online: <https://www.ontario.ca/page/d-1-2-land-use-compatibility-specificapplications> D-Series Guidelines.

The Study shall include, but is not necessarily limited to:

- A list of industrial land uses within 1000 metres of the proposed development.
- Classifications per MOECC Guideline D-6 of nearby industrial land uses and their distances to the proposed development.
- For industrial facilities whose area of influence includes sensitive land uses associated with the proposed development, copies of any issued Environmental Compliance Approvals.
- Copies of any emission summary tables required as part of the Study process.
- Methodology and results of air sampling, noise analysis, odour community surveys, and dust sampling required as part of the Study process.
- Air dispersion modelling and / or noise propagation modelling to determine the potential impacts on the proposed development.
- Identification and analysis of the impact of air emissions, odour, dust, noise and vibrations, generated from the immediately surrounding area, including without limiting the foregoing, the operations of airports, transportation/rail infrastructure, corridors and yards, waste management facilities, industries and other air emissions-generating uses on the proposed development.

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- Identification and analysis of the impact of air emissions generated within the proposed development on itself.
- Recommendations for air emission mitigation, including both potential emission control upgrades at sources and any adjustments to the site plan and architectural design as are necessary to minimize exposure to air emissions, odour, and dust, and to comply with relevant regulations and standards including, if necessary, applying for Environmental Activity and Sector Registry (EASR) registrations or Environmental Compliance Approvals to the Ontario Ministry of the Environment and Climate Change.
- Determine the projected sound and vibration exposures for a proposed development both from and to adjacent uses, for stationary and mobile noise sources, and any mitigation measures needed.

## Additional Resources:

- Environmental Protection Act R.S.O. 1990 Chapter E19
- MECP D-Series of Guidelines for Land Use Compatibility
- Ontario Regulation 419/05 (Air Pollution – Local Air Quality)
- NPC-300 Environmental Noise Guideline: Stationary and Transportation Sources

## Note

The City of Brampton may wish to hire a third-Party Subject Matter Expert, at the expense of the applicant, to peer review selected technical reports submitted in support of a development application where there is no in-house expertise available.

In addition to meeting Ministry objectives, the City may require the implementation of any necessary mitigation measures as a condition of draft approval. Staff must be satisfied that conditions are met before recommending final approval. Since guidelines and protocols may change from time to time, it is recommended for developers and their consultants to review relevant provincial guidelines and reference documents with respect to air quality, odour, noise, and vibration, as well as policies related to land use compatibility within the Brampton Official Plan to ensure that any submitted documents address the applicable requirements.